is selected from the group consisting of 12E10 (SEQ ID NO:79), 12B5 (SEQ ID NO:77), 10F6 (SEQ ID NO:74) and 12D5 (SEQ ID NO:78).

50. (New) An isolated nucleic acid encoding an agonist antibody, fragment or variant thereof which binds to human c-mpl, wherein said antibody, fragment or variant thereof is selected from the group consisting of: Ab1, Ab2, Ab3, Ab4, Ab5 and Ab6, wherein each Ab1-Ab6 comprises a VH and VL chain, each VH and VL chain comprising CDR amino acid sequences designated CDR1, CDR2 and CDR3 separated by framework amino acid sequences, the amino acid sequence of each CDR in each VH and VL chain of Ab1-Ab6 is selected according to the following table:

Ab1:	$VH^{CDR1}$	$VH^{CDR2}$	$VH^{CDR3}$
	(SEQ ID NO: 1)	(SEQ ID NO: 3)	(SEQ ID NO: 5)
	(SEQ ID NO: 2)	(SEQ ID NO: 4)	(SEQ ID NO: 6)
	$\mathbf{VL}^{\mathtt{CDR1}}$	$\mathbf{VL^{CDR2}}$	$VL^{CDR3}$
	(SEQ ID NO: 7)	(SEQ ID NO: 9)	(SEQ ID NO: 11)
	(SEQ ID NO: 8)	(SEQ ID NO: 10)	(SEQ ID NO: 12)
Ab2:	$ m VH^{CDR1}$	$ m VH^{CDR2}$	$ m VH^{CDR3}$
	(SEQ ID NO: 13)	(SEQ ID NO: 15)	(SEQ ID NO: 17)
	(SEQ ID NO: 14)	(SEQ ID NO: 16)	(SEQ ID NO: 18)
	$\mathbf{VL}^{\mathtt{CDR1}}$	$ m VL^{CDR2}$	$\mathbf{VL}^{\mathtt{CDR3}}$
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab3:	VH <sup>CDR1</sup>	$ m VH^{CDR2}$	VH <sup>CDR3</sup>
	(SEQ ID NO: 25)	(SEQ ID NO: 27)	(SEQ ID NO: 29)
	(SEQ ID NO: 26)	(SEQ ID NO: 28)	(SEQ ID NO: 30)

	$VL^{CDR1}$	$ m VL^{CDR2}$	${ m VL}^{ m CDR3}$
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab4:	$\mathbf{V}\mathbf{H}^{\mathtt{CDR1}}$	VH <sup>CDR2</sup>	VH <sup>CDR3</sup>
	(SEQ ID NO: 25)	(SEQ ID NO: 31)	(SEQ ID NO: 33)
	(SEQ ID NO: 26)	(SEQ ID NO: 32)	(SEQ ID NO: 34)
	$VL^{CDR1}$	$VL^{CDR2}$	$VL^{CDR3}$
	(SEQ ID NO: 35)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab5:	VH <sup>CDR1</sup>	$ m VH^{CDR2}$	VH <sup>CDR3</sup>
	(SEQ ID NO: 36)	(SEQ ID NO: 38)	(SEQ ID NO: 40)
	(SEQ ID NO: 37)	(SEQ ID NO: 39)	(SEQ ID NO: 41)
	$\mathbf{VL}^{\mathtt{CDR1}}$	$ m VL^{CDR2}$	$VL^{CDR3}$
	(SEQ ID NO: 19)	(SEQ ID NO: 21)	(SEQ ID NO: 23)
	(SEQ ID NO: 20)	(SEQ ID NO: 22)	(SEQ ID NO: 24)
Ab6:	$ m VH^{CDR1}$	VH <sup>CDR2</sup>	VH <sup>CDR3</sup>
	(SEQ ID NO: 42)	(SEQ ID NO: 44)	(SEQ ID NO: 46)
	(SEQ ID NO: 43)	(SEQ ID NO: 45)	(SEQ ID NO: 47)
	$ m VL^{CDR1}$	$ m VL^{CDR2}$	$ m VL^{CDR3}$
	(SEQ ID NO: 48)	(SEQ ID NO: 50)	(SEQ ID NO: 52)
	(SEQ ID NO: 49)	(SEQ ID NO: 51)	(SEQ ID NO: 53).

- By Cont
- 51. (New) The isolated nucleic acid of Claim 50, wherein said agonist antibody, fragment, or variant thereof is a humanized antibody, fragment or variant thereof.
- 52. (New) The isolated nucleic acid of Claim 50, wherein said agonist antibody, fragment, or variant thereof is a non-naturally occurring antibody, fragment or variant thereof.

- 53. (New) The isolated nucleic acid of Claim 50, wherein said agonist antibody, fragment, or variant thereof is a human antibody, fragment or variant thereof.
- 54. (New) The isolated nucleic acid of Claim 50, wherein said agonist antibody stimulates proliferation, differentiation or growth of megakaryocytes.
- 55. (New) The isolated nucleic acid of Claim 50, wherein said agonist antibody stimulates megakaryocytes to produce platelets.
- 56. (New) The antibody of Claim 50, wherein said agonist antibody is selected from the group consisting of svFv, Fab, F(ab')<sub>2</sub> and IgG.
- 57. (New) The antibody of Claim 50, wherein said agonist antibody is a monoclonal antibody.-

## **REMARKS**

Claims 43-45 have been cancelled. Claim 46 has been amended to change the dependency. Support for new Claims 49-57 is found throughout the specification. For example, support is found at page 9, line 34 to page 11, line 14, page 18, lines 26-32, page 23, lines 8-10, and page 24, line 3. Accordingly, no question of new matter arises and entry of the amendments is respectfully requested.

## Rejection under 35 U.S.C. §112, second paragraph

On pages 2-3 of the Office Action, Claims 43-48 have been rejected under 35 U.S.C. §112, second paragraph as being indefinite. In particular, the Examiner asserts that the recitation of "a thrombopoietin receptor" is indefinite. Additionally, the Examiner states that it is unclear